Chapter 10 Scheme 1.6

Drawings SF Numbers Program **Outline Spec for Cost Estimate Cost Estimate**



GYMNASIUM FEASIBILITY STUDY

TAKOMA PARK COMMUNITY CENTER

11/01/06

NOTES: 1. GRADES, PROPERTY LINE AND OTHER SITE INFORMATION APROX. NEED SURVEY TO VERIFY.

NEW PROPOSED GYM FACILITY
AREA CALCULATIONS:
-GYM AREA: 5,400

5,400 SF

1,400 SF*

-OTHER AREAS: -ADDITIONAL SF FOR

POSSIBLE EXPANSION 300 SF

TOTAL AREA: 7,100 SF

*THIS AREA IS APPROX. THE SAME AS THE AREA FOR GYM SUPPORT SPACES ON THE ABELL PERMIT SET

PARKING CALCULATIONS: LEVEL 1:

- SURFACE SPACES:

46 (2 HC)

- ENCLOSED GARAGE SPACES:

OPEN GARAGE SPACES:

TOTAL SPACES: 79 (2 HC)

LEVEL 2: - SURFACE SPACES:

96 (5 HC)

TOTAL SPACES: 96 (5 HC)

TOTAL SPACES, ALL LEVELS: 175 (7 HC) TOTAL EXIST SPACES:

145 (7 HC)

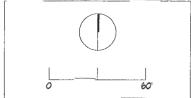
TOTAL ADDITIONAL SPACES:

30 (O HC) APPROXIMATE AREA OF

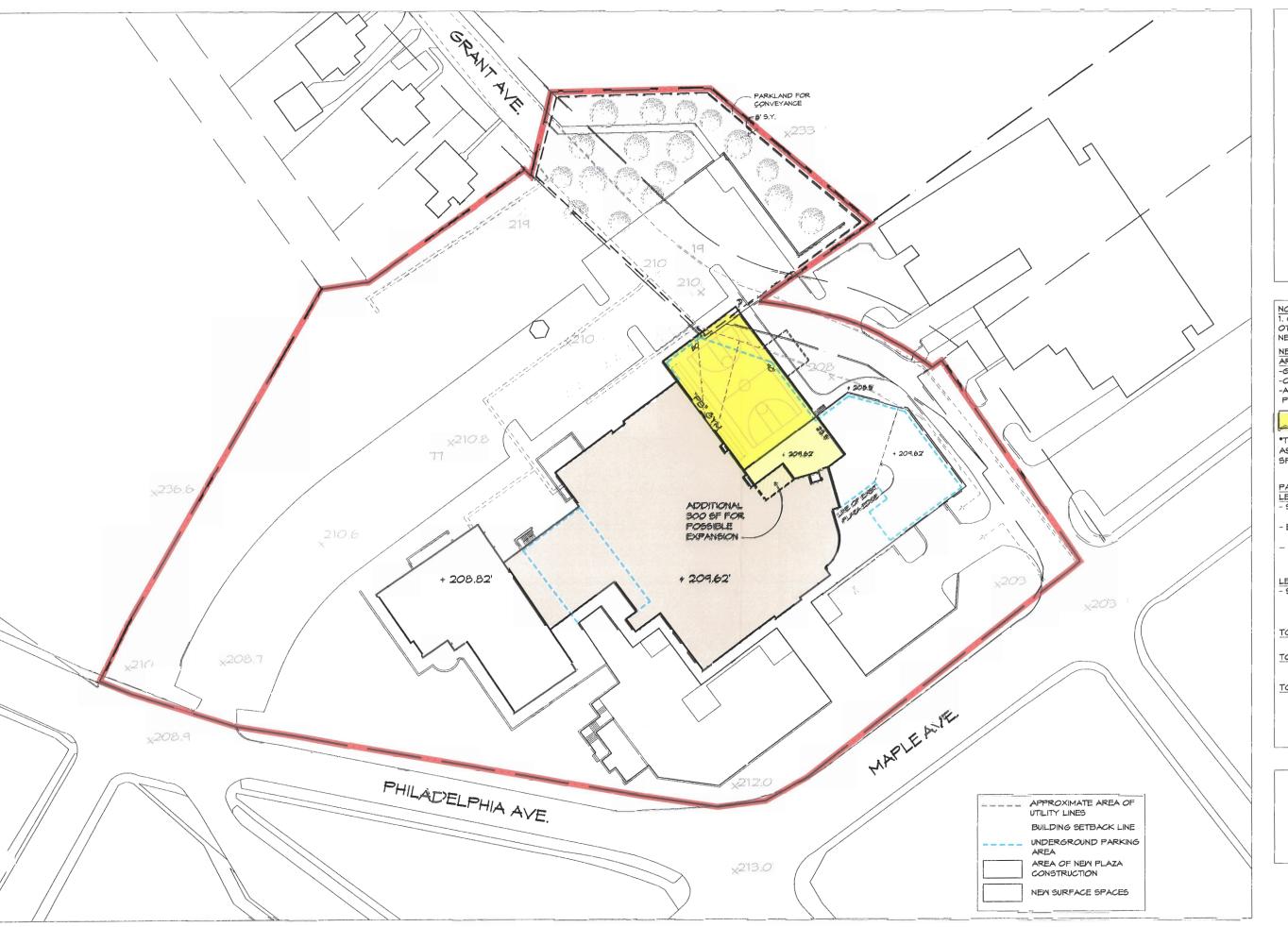
UTILITY LINES

BUILDING SETBACK LINE

NEW UNDERGROUND PARKING CONSTRUCTION



SCH 1.6 - LVL. 1 SITE 4



GYMNASIUM FEASIBILITY STUDY

TAKOMA PARK COMMUNITY CENTER

11/01/06

NOTES: 1. GRADES, PROPERTY LINE AND OTHER SITE INFORMATION APROX. NEED SURVEY TO VERIFY.

NEW PROPOSED GYM FACILITY AREA CALCULATIONS:

-GYM AREA: -OTHER AREAS:

5,400 SF 1,400 SF* -ADDITIONAL SE FOR POSSIBLE EXPANSION 300 SF

TOTAL AREA: 7,100 SF

*THIS AREA IS APPROX. THE SAME AS THE AREA FOR GYM SUPPORT SPACES ON THE ABELL PERMIT SET

PARKING CALCULATIONS:

LEVEL 1

- SURFACE SPACES:

46 (2 HC) - ENCLOSED GARAGE SPACES:

OPEN GARAGE SPACES:

TOTAL SPACES: 79 (2 HC)

LEVEL 2: - SURFACE SPACES:

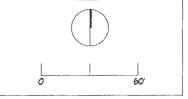
96 (5 HC)

TOTAL SPACES: 96 (5 HC)

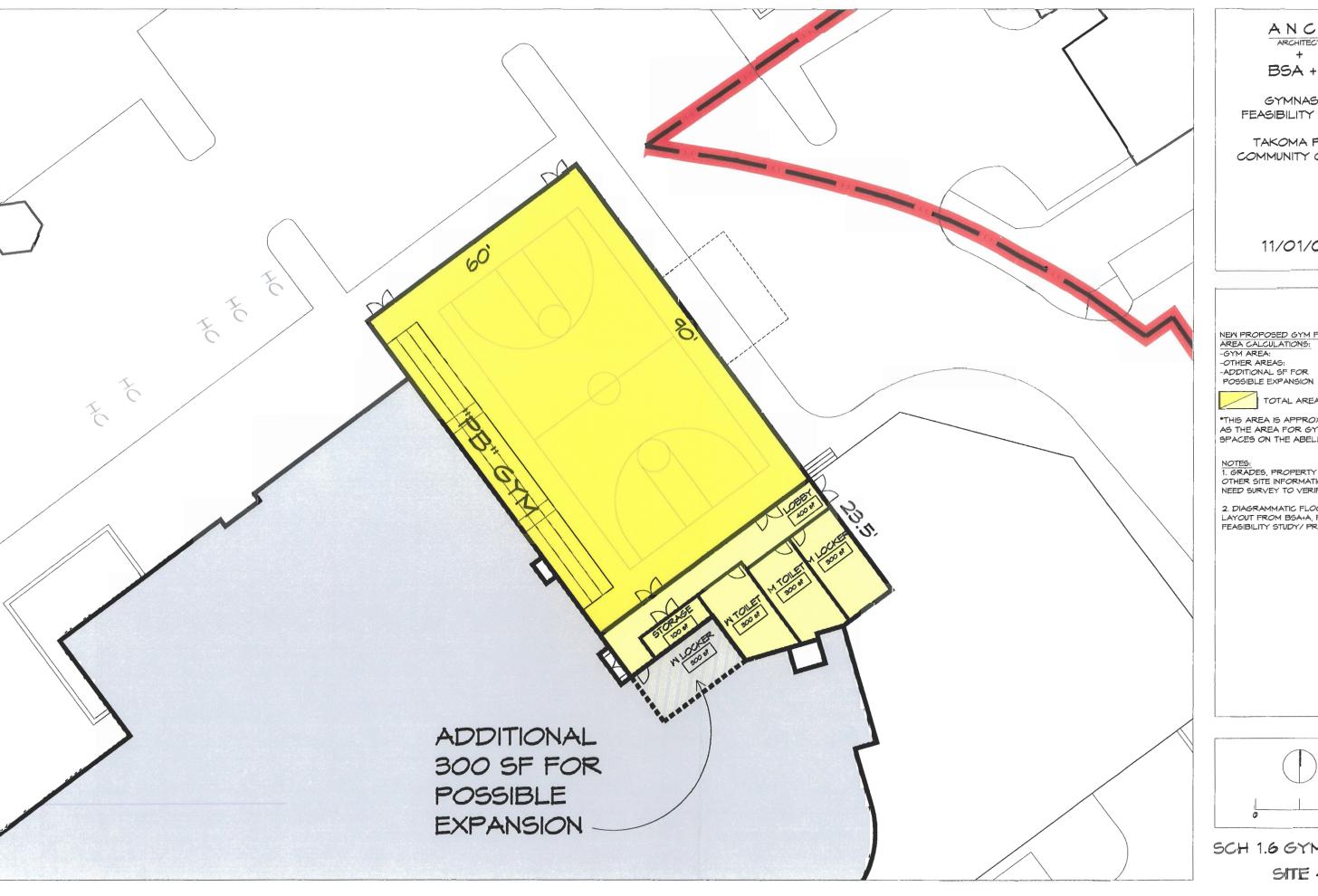
TOTAL SPACES, ALL LEVELS: 175 (7 HC)

TOTAL EXIST SPACES: 145 (7 HC)

TOTAL ADDITIONAL SPACES: 30 (0 HC)



SCH 1.6 - LVL. 2 SITE 4



BSA + A

GYMNASIUM FEASIBILITY STUDY

TAKOMA PARK COMMUNITY CENTER

11/01/06

NEW PROPOSED GYM FACILITY AREA CALCULATIONS:

-GYM AREA: -OTHER AREAS:

5,400 SF 1,400 SF* -ADDITIONAL SF FOR 300 SF

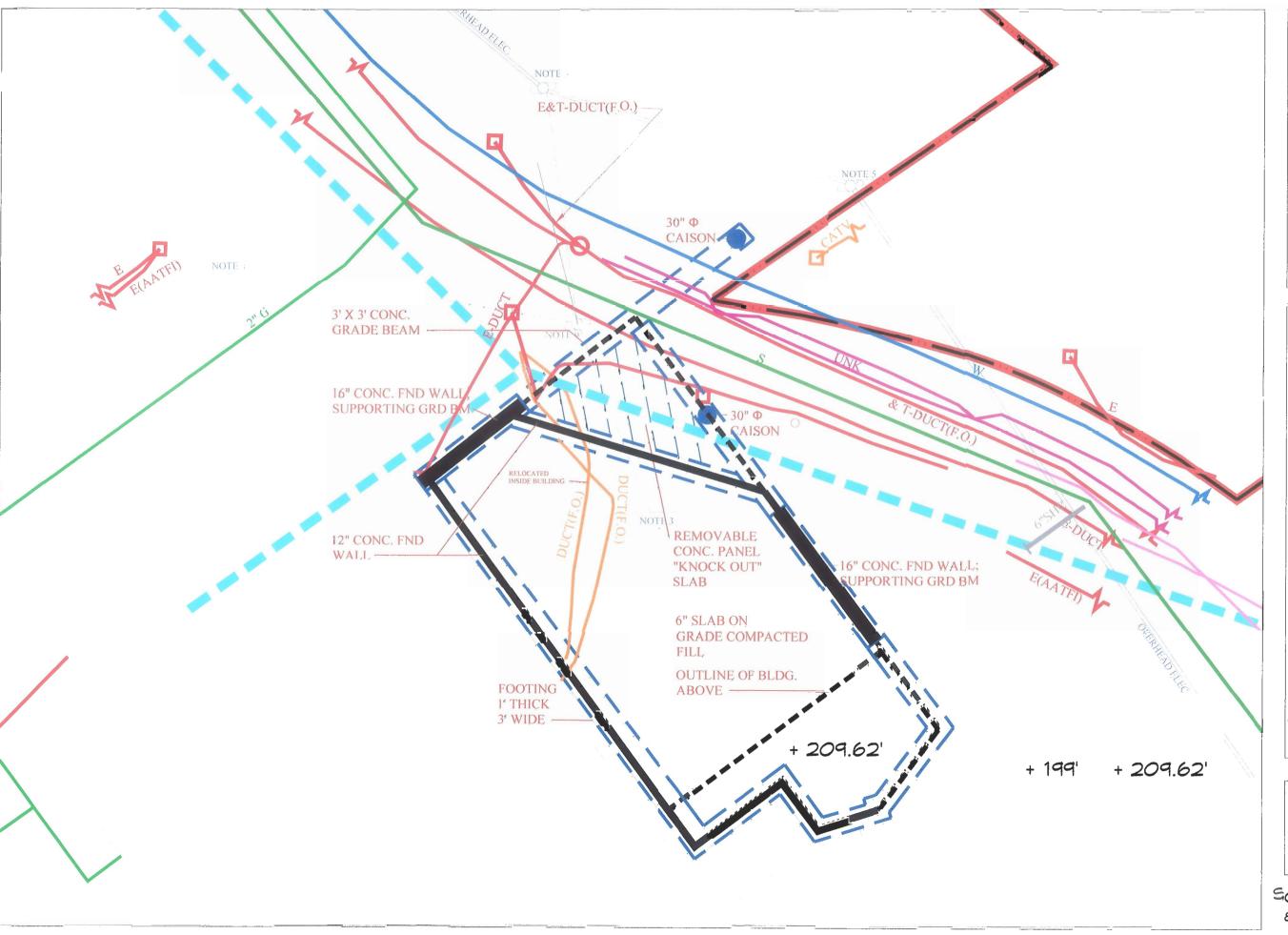
TOTAL AREA: 7,100 SF

*THIS AREA IS APPROX. THE SAME AS THE AREA FOR GYM SUPPORT SPACES ON THE ABELL PERMIT SET

NOTES: 1. GRADES, PROPERTY LINE AND OTHER SITE INFORMATION APROX. NEED SURVEY TO VERIFY.

2. DIAGRAMMATIC FLOOR PLAN LAYOUT FROM BSA+A, FOR FEASIBILITY STUDY/ PRICING ONLY.

SCH 1.6 GYM PLAN SITE 4



GYMNASIUM FEASIBILITY STUDY

TAKOMA PARK COMMUNITY CENTER

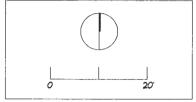
11/01/06

- 1. DRAWING C3(MANDATORY REFERRAL SUBMISSION 4-28-02) FROM LAWRENCE & ABELL ASSOCIATES LTD., MZXA240 FROM SO-DEEP INC. (2-13-06) MUNICIPAL COMPLEX STORMWATER SYSTEM PLAN WAS USED.
- 2. UTILITY LINE INFORMATION AND
- LOCATION MAY NOT BE CURRENT
 OR UP TO DATE. NEED TO VERIFY.

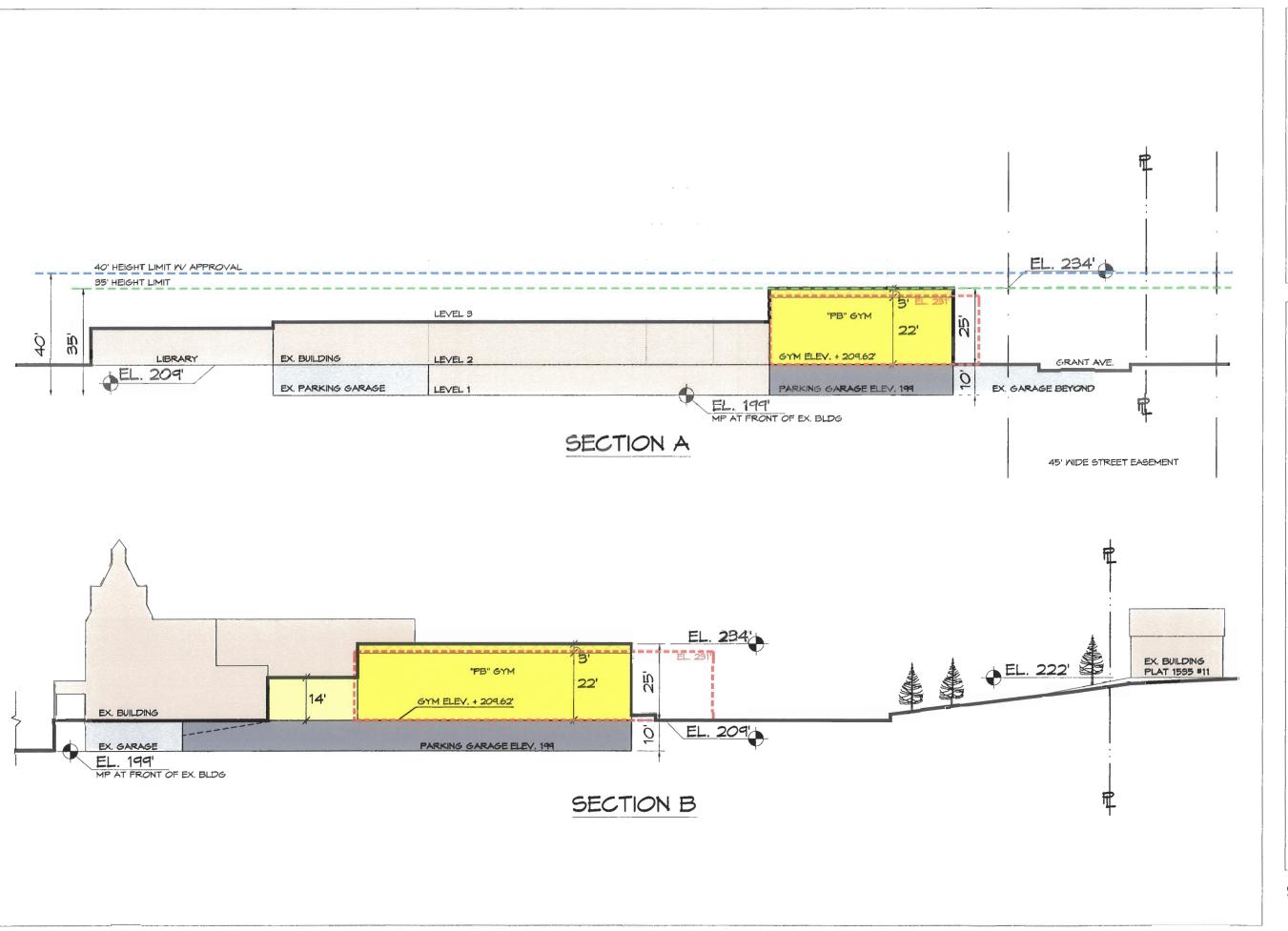
 3. OVERHEAD ELECTRICAL UTILITY
 LINES CONNECTED TO PORTABLE
 BUILDINGS, LOCATION AND INFO APROX. NEED TO FIELD VERIFY.
- 4. CONC. FOUNDATION WALLS, GRADE BEAMS AND CAISONS, ARE FROM INFO PROVIDED BY TADJER, COHEN, EDELSON AND ARE DIAGRAMATIC CONCEPTS FOR ESTIMATING PURPOSE ONLY, NEED TO VERIFY STRUCTURAL INFO AND UTILITY EASEMENT LOCATIONS AS PROJECT DEVELOPES.
- DEVELOPES.

 OVERHEAD ELECTRICAL UTILITY LINE AND POLE LOCATION APPROXIMATE NEED TO FIELD VERIFY.

 6. UTILITY LINE RELOCATION INFO FROM ADTEK DWG. IS FOR PRICING ONLY
- AND SHOMS UTIL. LINES AFFECTING PROPOSED BLDG. AREA ONLY.
- ASSUMED LIMIT OF SURVEYED AREA FROM DRWG MZXA240 BY 50-DEEP INC. NEED TO
- END OF ELECTRONIC DESIGNATION
- F.O. FIBER OPTICS
- OVERHEAD ELECTRICAL POLE
- -- REMOVED UTILITY



SCH 1.6 FOUNDATION & GRADE SM. INFO



ANCL©

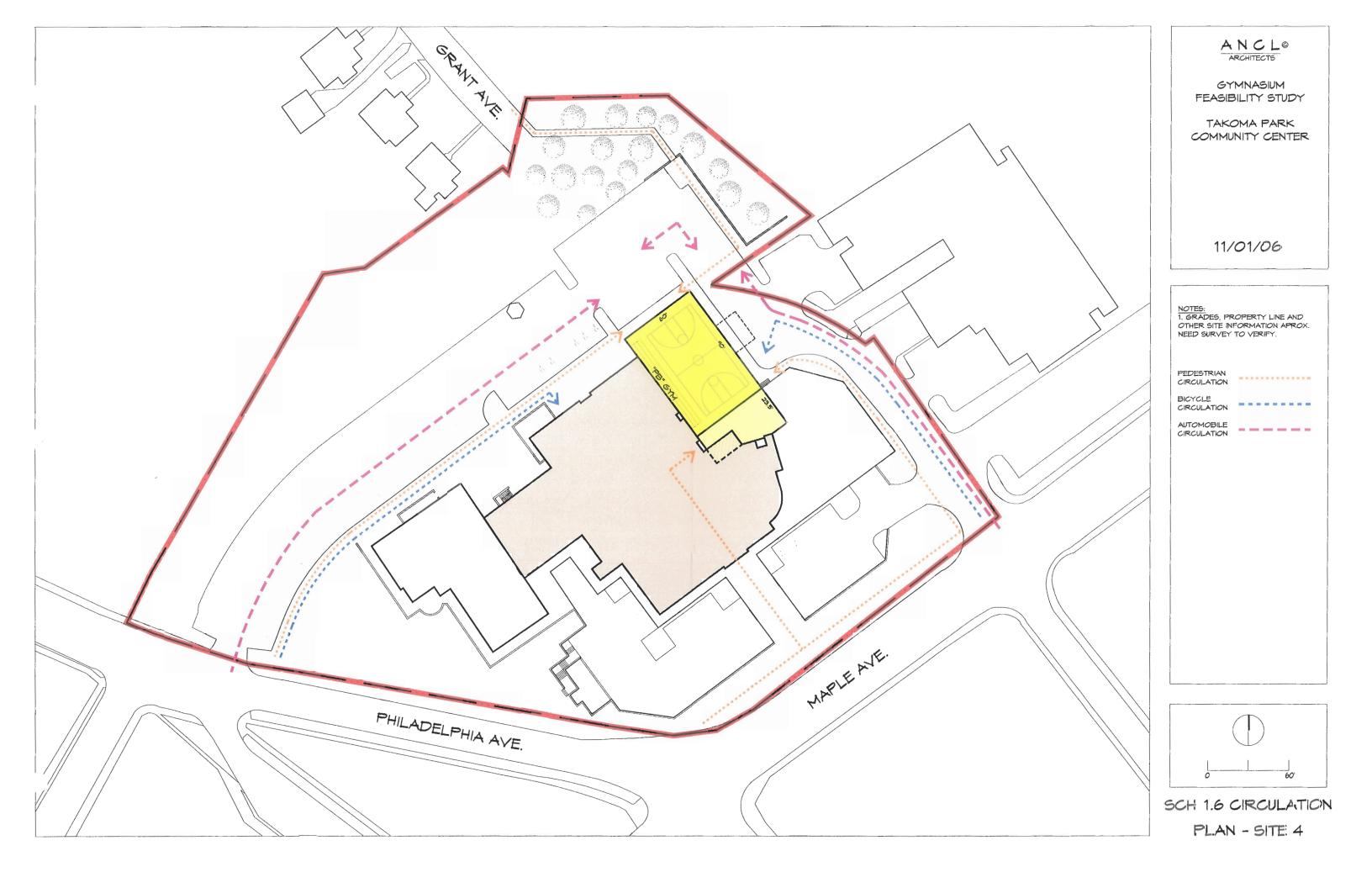
GYMNASIUM FEASIBILITY STUDY

TAKOMA PARK COMMUNITY CENTER

11/01/06



SCH 1.6 - SECTION SITE 4



ANCL/City of Takoma Park, Gym

Preliminary Bldg. SF

Total On and Off Site Parking Spaces

November 1, 2006

These are very preliminary GFA numbers; further review is necessary. Proposed bldg GFA/SF numbers are rounded to the nearest 50.

Sch	1	.6.	Site	4
		•••		-

Sch 1.0, She 4						
Lot Size (based on prev deed info. & land transfer)	186,300 SF					
Maximum Lot Coverage Allowed (R-60)	35%					
Allowable Coverage (GFA)	65,205					
Existing Lot Coverage (Community Plaza & Library)	30,000					
Available GFA for Bldg Expansion	35,205 [if on	one level				
	based	on max. allowable	coverage]			
Proposed Bldg.	GE.	E.I.				
Floor Level	GFA	El.				
Existing						
Level 1/Public Safety Plaza	20,100	198.95				
Level 2/ Community Plaza	22,500	209.62				
Library	7,500	208.82				
Total, Level 2	30,000					
Level 3/ City Administration Plaza	10,500	198.95				
Total, Exist. Bldg.	60,600 GFA	7				
D. Lilling				g		
Proposed Addition	5.400	Gym Space Program:		Support Space I		Non
Gymnasium	5,400	Main Court Run-outs	2,950 NSF 1,650	Lockers (2) Toilets (2)	600 600	NSF
Miscellaneous Gym Bldg. Support	1,700	Bleachers	700	Office	0	
-Locker Rooms, toilets, office,	1,700	Misc.	100	Storage	100	
storage, lobby, weight room, etc.		MISC.	100	Fitness Rm.	0	
storage, tobby, weight room, etc.				Misc. & Circ.	400	
Gym Bldg. Addition, Proposed	7,100 NSF	TOTAL:	5,400 NSF		1,700	NSF
Gym Bldg. Addition, Proposed, Exterior Wall Area	400 GFA					
Total Gym Bldg. Addition, Proposed	7,500 GFA					
Total Exist. Bldg.& Proposed Gym Bldg. Addition	68,100 GFA	1				
			106 2007			
Lot Coverage, Exist. & Proposed	20%	[(30,000 + 7,500)	· 186,300]			
Existing Parking	Number	Area +/-(SF)				
Existing Surface Spaces	128	40,100				
Existing Enclosed Garage Spaces	8	3,700				
Existing Open Garage Spaces	9	3,200				
Total Existing Spaces	145	47,000 SF				
Duamand On Cita Dauling Change (Nam Eviet)	Number	Area I / (SE)				
Proposed On Site Parking Spaces (New + Exist.) Proposed Surface Spaces	Number 142	Area +/-(SF) 43,800				
Proposed Surface Spaces Proposed Enclosed Garage Spaces	33	13,200				
Proposed Open Garage Spaces	0	13,200				
Total Proposed On Site Spaces	175	57,000 SF				
Total Froposcu On Site Spaces	1/3	37,000 SF				
Additional Off Site Parking Spaces (@PB Gym)	0					
m-4-10 - 1000011	4					

175

TAKOMA PARK COMMUNITY CENTER GYMNASIUM EXPANSION SCH 1.6

Space Program

11/01/06

SPACE	Size Qu	ant.	Total NSF	Remarks
O was a sai uma				
Gymnasium	0.050		0.050	401 741
Main Court Area	2,950	1	2,950	40' x 74' main court
Run-outs	1,650	1	1,650	8' ends and 5.5' sides
Bleachers	700	1	700	4 rows of 52 per row = 208 seats
Misc.	100	1	100	misc. circulation
SUBTOTAL			5,400	
Lockers	300	2	600	male & female
Toilets	300	2	600	male & female
Office	0	1	0	
Storage	100	1	100	
Fitness Room	0	1	0	
Misc.& Circulation	400	1	400	
SUBTOTAL			1,700	
TOTAL			7,100	

Level 1: Additional Police Spaces

N/A

Preliminary Outline spec

SCH 1.6

Purpose of this outline spec is to provide pricing guidance for the cost estimator. These are for specific items only and are intended to supplement general items noted in a feasibility cost estimate (i.e. typical items such as doors, hardware, plumbing fixtures, lights, etc...). Also note that Structural, MEP, and Civil information is provided for limited pricing guidance only in this information and on the drawings; Providing in depth review of engineering calculations, spec information, drawings is beyond the scope of this feasibility pricing exercise. The limited engineering information provided is for feasibility pricing guidance only. Information was developed by ANCL and BSA&A

Assumed start time before construction---18 months Assumed construction time---12 months

Scheme 1.6 "PB" Gym w/ Utilities remaining in place, easements to be negotiated 1

GYMNASIUM OUTLINE SPECIFICATIONS

GENERAL

The City of Takoma Park desires to study the feasibility of building a gymnasium and support spaces adjacent to the existing Takoma Park Community Center.

Given the many challenging site conditions, such as the property lines, topography, soil conditions, utilities and the existing building's needs, the size and configuration of the gym is driven more by these constraints than by the program goals. Still, in an effort to define the minimum and preferred gym configuration, components and furnishings, these outline specifications have been developed. Also for this Scheme 1.6 only the "PB" Gym size (based on a suggested comparison to Piney Branch gym) was considered.

GYMNASIUM

The gymnasium space itself should be sized to support recreational and athletic activities. As such, a regulation high school sized court (50' x 84') is preferred, but the "PB" Gym court size for this is significantly smaller (40'x 74' \pm -) Proper end and side run-outs are also needed. End run outs should be 8' minimum, Side run-outs should be 5' minimum with 6' \pm 8' preferred. Two cross courts on non-regulation size should be included, sized

As discussed elsewhere in the feasibility study, the decision was made with ANCL and the City to preliminarily price the cost of building over the utilities before continuing negotiations with the various utility companies and the city regarding building over the existing utilities. Even the City which controls the 24" rep storm drain was reluctant to even consider an easement for themselves. Rather than continue discussions with Pepco, etc.. it was decided to first price a possible building solution (such as grade beams w/ knock out panels) to this problem to see what the costs might be to build over the utilities in lieu of relocating them, and prior to negotiating with the utilities and engineering a solution. Estimate should consider costs to minimize future demolition of gym floors and building walls so that a utility company can gain access to the gym space through pre-determined opening locations. What is not included here would be reconstruction costs to replace the walls floors concrete slab, etc that would be demolished if a utility needed to get access in the future.

to the maximum safe usable floor area. The walls should be constructed of durable material, preferably concrete block. Ceilings should be exposed. The flooring should be carefully considered, and should range from a wood floor system to synthetic or tile sport floor systems. Main court backboards should be rectangular glass. Side court backboards should be rectangular painted wood or fiberglass. All backboards should be height-adjustable (motor-assisted). All backboards should be retractable (forward-fold preferred). All rims should be break-away. Floor striping should be appropriate to the various activities, and should, at a minimum, contain (1) main basketball court, (2) cross basketball courts, (1) main volleyball court, and (2) cross volleyball courts. Although these must now be sized to accommodate the smaller "PB" gym size. A roll-away divider curtain, located in the middle of the main court, should be provided. Wall pads behind each backboard (removable for backboards at bleachers) shall be provided. Additional wall pads should be considered for other activities, such as indoor soccer. Roll-away volleyball standards should be provided. Roll-up floor mats for protecting the gym floor should be provided. See Gym Sizes Drawing for gym dimensions.

BLEACHERS

Bleachers are also desired. Standard bleachers, when fully extended, typically are 3'deep. The width should be based on the number of seats (14 max. between aisles) at 20" – 22" per seat. Aisles should be 3' wide minimum. Three sections of 14 seats across (52 seats total), plus two aisles, will equate to 76 linear feet, or 230 square feet of floor space. So, for every 52 seats desired, 230 square feet of extended area is needed. Bleachers should be manually retractable and lockable. All accessibility requirements should be incorporated. "B" gym size will provide seating for 208, "PB" gym size provides seating for 156 seats

LOCKERS

Locker rooms for separate male and female changing are required. No shower facilities are needed. Proximity to restrooms is desired. 40 metal double-tiered lockers (locks provided by users) should be provided per locker room, along with benches, mirrors and other miscellaneous furnishings. Floors should be ceramic tile. Walls should be painted concrete block. Ceilings should be lay-in acoustic tiles.

TOILETS

Male and female public restrooms are required. The total fixture count in each shall be confirmed based on the projected occupant load and the local code requirements. Floors should be ceramic tile. Walls should be painted concrete block. Ceilings should be washable lay-in acoustic tiles. Assume 2 we and 1 urinal for men's locker room; 2 we for women's locker room. Ptd mtl tlt stalls; floor mounted.

OFFICE

A small (100 sf) office should be provided. It should be located to provide visual control and supervision of the main lobby. There should also be a window into the gym, for supervision. A data and phone line should be provided. Floor should be VCT. Walls should be painted. Ceiling should be lay-in acoustic tile.

STORAGE

A large storage room, located directly off the gymnasium, is required. There should be metal shelving for athletic equipment. Ample open floor space is needed for roll-away standards, fold-away goals, ball carts and other large equipment. Standard double doors are required. Floors should be sealed concrete. Walls should be painted concrete block. The ceiling should be exposed.

LOBBY

A main lobby, directly accessible from the exterior, is required. It should provide access to the gym, lockers, toilets and office. Depending on the location and configuration of the gym, secondary access to the existing building lobby is desired. Flooring should be tile. Walls should be painted. The ceiling should be lay-in acoustic tile.

WEIGHT / FITNESS ROOM

If space is available (possibly on a second floor, provided access is appropriate), a weight and fitness room should be included. It should be sized to hold cardio equipment, along with some strength equipment. The flooring should be rubber tiles. The walls should be painted concrete block. The ceiling should be high enough to allow for lay-in tile without fear of damage. Provide allowance for exercise equipment and weight sets

In addition to above, note the following specifc material items for cost estimate:

[Note- Structural, MEP, and Civil information is provided for limited pricing guidance only; Providing in depth review of calculations, spec information, drawings is beyond the scope of this feasibility pricing exercise. The engineering information provided is for limited pricing guidance only]

- 1. Gym Exterior Wall
 - 4" Brick veneer; 2" rigid insulation; 12" CMU grouted w/ reinforcing; w/ Painted interior surfaces; sound absorbing block at 15' above floor
- 1A. [for Sch 1.6 only] 3' x 3' reinforced concrete grade beam w/ 30" diameter caissons as shown on dwg; w/ concrete knock out panel in floor and adjacent two exterior walls 15' knock-out panel; 30" deep steel beam at roof supported on steel column and 12" cmu
- 2. Gym Interior Wall

12" CMU; w/ painted interior surfaces

- 3. Support Space exterior wall
 - 4" Brick veneer, 2" rigid insulation; 8"CMU; w/ painted interior surfaces
- 4. Support Space interior wall

8" CMU, w/ painted interior surfaces

- 5. Windows
 - 2" x 4" coated alum frame w/ insulating safety glass; assume 5'x 5' opng, w/2 opngs per 25lf of exterior wall; located at 15' above grade

6. Entrance

2" x 4" coated alum frame; 7'-6" hgt w/ transom 2' high; 2 sets of double doors w/vestibule

7. Skylights

5'x 5' plastic w/integral curb; insulating, condensation proof; 16 units in gym roof 8 units in support spaces

8. Interior Partition Wall

8" cmu painted

9. Roof System

Gym roof, 4'mtl joists 6' oc, w/ 2" mtl pan, tapered rigid insulation, single ply membrane system w/ guarantee; metal flashing; ptd finishes exposed, no clg

10. Foundation Walls/Stl Structural support

Parking level/gym support, 12" conc.

Grade beams where occur at utilities scheme 1.6 only; 3' x 3' stl reinf conc grade beam, 30" dia caisson to rock assume 12' below grade; 2 caisson drilled; 16" stl reinforced conc foundation wall under grade bm for support

Gym floor supported on 8" conc. slab w/8" drops; 20' x 30' grid; col on 12" thick 5'x5' spread footings bearing on rock at 12' below grade; Shock absorbent sleeper system over conc. sub floor.

Digging required to locate caissons between utility lines as noted; 30" deep stl wf beam at roof over grade beam location were occurs on 10" stl tube support; 20'x 20' cmu knock-out panels at utilities

Waterproofing on conc. below grade, foundation drainage system Provide concrete slab knock-out panel in concrete sub floor at utilities.

11. Foundation slab

6" conc. slab on grade for parking levels;

12. Foundation Footings

12" x 3' wide reinf continuous conc. footing

13. Floor

VAT in corridors; Tile floor in lockers and bathrooms; VAT in support rooms, office, wgt room w/ rubber mat covering

14. Ceiling

2x2 lay-in clg in all support areas; 2x2 lay in washable surface for toilet rooms

15. Gym Floor

Gym flooring maple hardwood floor, painting for sports layouts on mtl system sleepers over concrete slab; provide vapor barrier and resilient isolation sleeper

systems for gym floor; Conc. Sub floor above parking area; 8" concrete slab with 8" drops; Possible flooring manufacturer: <u>Wood Floor</u>, Robbins Air Channel Classic; <u>Synthetic floor</u>, Mondo-Advance triple layer

16. Corridor Floor

VAT; multiple colors/pattern

17. Bathroom Finishes

Ceramic tile finishes to 8', ptd cmu above

18. Site work

Conc. Sidewalk and entrance plaza, broom finish; Stone veneer retaining walls and Misc landscaping; provide allowance for trees, flowers, shrubs at building perimeter; 5" caliper tree landscaping at rear 20 trees; With additional 8 trees at new retaining walls; Provide concrete deck, with waterproofing, at entrance and junction to exist building over existing parking

19. Mechanical

2 separate RTU at gym roof; 2 separate RTU over support space; assume new mechanical system (HVAC) independent from existing building; tie in to existing fire sprinkler system gym and support rooms; fire alarm system; assume increase existing fire sprinkler pump system and alarm system.

20. Electrical

Locate sub panels for Gym in gym support space; tie in Gym electrical to existing generator system for emergency lighting only; tie in at existing ctr electrical room; assume w/ 100' conduit run allowance to main electric room.

21. Plumbing

Plumbing tic in to existing sanitary line at center assume 50' of slab to connect through and patch

22. Utilities; No Relocation [at scheme 1.6 only]

Assume no relocation of water, electric, and gas, storm, as noted on dwgs; assume utilities 4.5' minimum depth below grade; provide structural support at bldg. corner and provide knockout panels in wall and floor for access to utilities' in easement

23. Excavation/Fill

Assume rock at 12' below grade for footings [and caissons were noted]; at slab on grade above fill assume removal of fill to 5' below grade and replacement with compacted soil to grade for slab.

24. Gym Equipment

4 retractable basketball supports, motorized;

2 volleyball setups, in floor, movable bleachers for 200, floor mats 300 sf, wall mats 300 sf 1 electric score board 6' x 10', misc posters and decoration, bulletin

Scheme 1.6 Page 6 of 6; 10/26/2006

boards, sports equip misc. carts; room divider net w/motorized 70' length 25' hgt; Office furniture; weight room equipment

25. Building Telephone

Tie in to existing, 4 phone locations

26. Building Security

Tie in to existing; motion sensors, door alarms
[Lower level police lock-up rooms/cells assume 4 cells, 1 storage room, 2 toilets, 1 office, and circulation corridor. —Occurs on Sch 3.2 and 1.5 only²]

27. Equipment/Elevator/Stairs

No elev, no stairs; ladder access to roof; 1 exposed conc. Stair at parking below grade

28. Specialties

Separate prices/add-ones

Towers, decorative brick, Victorian details, 3 corners of gym; 10' hgt³ Brick embellishments; decorative brick pattern, multicolor brick, corbel at parapet Entrance canopy, decorative entrance canopy, brick and aluminum Infrastructure and preparation, utility relocation costs, parking facility costs Landscaping costs, Building costs, the cost of optional amenities such as locker facilities, weight room, entrance canopy

29. "Green" Systems

Separate prices/add-ones

Solar hot water systems for Gym lavatory only,

Synthetic wood gym floor

Painting systems, low odor

5000 watt Photo voltaic panels for exterior lighting; panels on roof; supplement regular lighting

5000 watt Photo voltaic panels for interior lighting; panels on roof; supplement regular lighting

For scheme 3.2 and 1.5 only---Assume for estimate Total 1650 SF----4 cells-- 320 sf; 2 toilets-- 200 sf; circulation 300sf; Office---180 sf; Program still needs development; this info is provided for pricing info only; still need to verify actual program with City.

³ For pricing only the information was taken from existing construction drawings showing details of roof towers and perimeter decorative roof. This is not necessarily the final design but is intended to allow for some money to be included along the lines of the "Victorian" design already established and most likely will continue as the project develops; as was discussed with the City.

Takoma Park Community Center Gymnasium Feasibility Study

ANCL Architects

Feasibility Study - Cost Estimate by Sked Consulting SCHEME 1.6

Clarifications and Qualifications

Notes regarding this estimate:

This estimate is based upon plans, sections, etc. given to A. Sked on October 16th 2006 together with an outline spec. Included were plans of each level of each scheme plus a building section, site plan and site utility plan for each scheme An outline specification was also available.

Continuous discussions took place with the project architect.

This estimate assumes an unpredictable market condition due to high energy,etc. prices; recent shortages of materials due to hurricanes, and a heavy construction workload in the USA; it is very difficult to assess future price trends at this time. Escalation has been very significant the past two years.

This is a feasibility study to examine and compare different schemes and to let the Client see the consequences of choosing one scheme rather than another. We are NOT attempting to assess the low bid that any scheme may attract but to recommend what in our view is a reasonable budget for future work.

The study assumes that the design of the project will be completed and the project ready to commence in eighteen months and a construction period of 12 months. Escalation has been calculated over a period of two years to the midpoint of construction. Escalation has been estimated at 8% per year over this period of time.

A design contingency factor of 15% has been included to cover the lack of detail at this early stage in design. A construction contingency factor of 5% has been included to cover change orders during construction due to unknown conditions, owners instructions, etc.

This estimate excludes:

Professional fees, testing, inspections, cost of land, legal and accounting fees, moving expenses, furniture, furnishings and equipment except as specifically itemized in this estimate, hazardous material removal and abatement. Interior landscaping Additional costs for work done in phases or out of sequence working.

Any costs in connection with security measures.

Commissioning, cabling, audio/video equipment, telephone systems and installation.

This cost estimate is based upon certain information. The scope of the estimate should be reviewed for completeness and to ensure that our interpretation of the drawings and other information is correct. This estimate should be updated as the design evolves and is completed.

This estimate represents our opinion of probable costs. We have exercised due professional diligence in preparing this estimate/study. As we have no control over material selection, market conditions, bidding, etc. no guarantee is given or implied with this study/estimate.

Takoma Park Community Center

Gymnasium Feasibility Center

General Summary

	Scheme 1.50		Scheme 3.20		Scheme 1.60
	\$		\$		\$
Parking Garage	\$1,117, 9 40	Parking Garage	\$818,872	Parking Garage	\$1,168,983
Police / Storage	\$337,163	Police / Storage	\$365,064	Police / Storage	\$0
Gymnasium	\$1,398,536	Gymnasium	\$1 ,574,501	Gymnasium	\$1,198,530
Support Space	\$1,003,874	Support Space	\$1,078, 195	Support Space	\$322,943
Site Work	\$656,390	Site Work	\$1,065,681	Site Work	\$662.755
Site Utilities	\$152,393	Site Utilities	\$14,410	Site Utilities	\$4,000
Sub-total	\$4,666,296		\$4,916,722		\$3,357,211
Add GC, Fee, Bond Design Contingend Escalation Constr. Contingend	\$1,013,146		\$885,010 \$870,260 \$1,067,519 \$386,976		\$604,298 \$594,226 \$7 28,918 \$264,233
Total	\$7,712,575		\$8,126,486		\$5,548,885

Scheme 1.60 \$

Parking	Garage:

Paramada Alama				
Foundations:	216 0	14.00	62.004	
Excavate for column foundations Dispose excess soil	216 C 31 C		\$3,024 \$688	
Backfill	185 C		\$1,663	
Prepare for concrete	600 S		\$1,003	
Extra for breaking out rock	216 C		\$17,280	
Concrete in column foundations	31 C		\$6,253	
Rebar in column foundations	2,400 LE		\$2,400	
Formwork to sides of column foundations	643 S		\$5,789	
Excavate for wall foundations	197 CI	UYD 14.00	\$2,757	
Dispose excess soil	45 CI	UYD 22.00	\$990	
Backfill	152 CI		\$1,367	
Prepare for concrete	651 S		\$1,302	
Extra for breaking out rock	197 CI		\$15,753	
Concrete in wall foundations	29 CI		\$5,787	
Rebar in wall foundations	1,085 LE		\$1,085	
Formwork to sides of wall foundations	434 SC		\$3,906	
Perimeter insulation Perimeter drain	868 SC 237 LN		\$868 \$4,2 6 6	
Sub-total	237 LI	NF1 10.00	\$76,377	\$76,377
Sub-total			\$70,577	Ψ10,511
Slab on Grade				
6" Concrete slab on grade	8,771 SC		\$54 ,819	
Additional thickening at pedestrian areas - allow	1,390 SC		\$6,950	
Metal angle or curb - allow	312 LN	NFT 20.00	\$6,240	
Sub-total			\$68,009	\$68,009
Structural Slab and Support				
Concrete in columns	22 Cl	UYD 225.00	\$5,040	
Formwork to columns	1,728 SC		\$20,736	
Rebar in columns	7,200 LE		\$7,200	
Finish to Columns	1,728 SC	QFT 1.50	\$2,592	
Concrete in beams	67 Cl	UYD 220.00	\$14,784	
Formwork to beams	2,304 SC		\$27,648	
Rebar in beams	7,200 LB		\$7,200	
Finish to beams	2,304 SC		\$3,456	
Concrete in 8" structural slab	275 CL		\$59,125	
Formwork to soffit of slab	7,464 SC		\$111,960	
Rebar in slab	72,000 LB		\$72,000	
Concrete in drop panels	40 CL 2,094 SC		\$9,005	
Formwork to sides and soffits of drop panels Rebar in drop panels	6,144 LB		\$37,686 \$6,144	
Finish to concrete	9,558 SC		\$11,469	
Sub-total	3,330 00	3(1 1.20	\$396,045	\$396,045
-			, ,	, - ,-
Basement Exterior Walls				
Concrete in walls	142 CL		\$30,530	
Formwork to walls	5,425 SC		\$65,100	
Rebar in walls	16,275 LB		\$16,275	
Finish to walls	5,425 SC		\$5,425	
Waterproofing and protection board	2,713 SC		\$13,565 \$25,000	
Strenghthen beam adjacent to existing Garage	1 LS	SUM 25,000.00	\$25,000 \$155,895	\$155,895
Sub-total			ψ100,080	φ100,0 0 0
Interior Partitions and Doors				
Not Applicable				
Sub-total			\$0	\$0

Interior Finishes						
Epoxy finish/sealer at floor		SQFT	5.00	\$43,855		
Striping		LNFT	0.65	\$176		
Misc. additional striping for h'cap signs, etc		LSUM	100.00	\$100		
Interface/8" CMU next ex. Wall Paint walls - exterior		SQFT	20.00	\$42,600		
Paint wails - exterior Paint columns		SQFT SQFT	0.60	\$2,580		
Paint columns Paint ceilings and drop panels	,	SQFT	0.60 0.70	\$864 \$6,530		
Sub-total	3,020	SQI I	0.70	\$96,704		
				Ψοσ, το τ	\$50,104	
Stair						
Exterior concrete stair; include exc, shoring, foundations,						
slab on grade, basement walls, conc stair and h/rails, low wall						
and railing at grade; painted, lighting, but no HVAC Sub-total	1	LSUM	80,000.00	\$80,000	***	
Sub-total				\$80,000	\$80,000	
Specialties and Equipment						
Allow for Garage Equipment	1	LSUM	23,000.00	\$23,000		
Allow for signage and misc. items		LSUM	2,000.00	\$2,000		
Sub-total				\$25,000	\$25,000	
					•	
HVAC						
Allowance	9,062	GSF	4.50	\$40,779		
Sub-total				\$40,779	\$ 40,7 7 9	
Plumbing						
Allowance	9,062	GSF	3.50	\$31,717		
Sub-total	,			\$31,717	\$31,717	
Electrical						
Allowance	9,062	GSF	17.40	\$157,679	*	
Sub-total				\$157,679	\$157,679	
Fire Protection						
Allowance	9,062	GSF	4.50	\$40,779		
Sub-total				\$40,779	\$40,779	
Site Preparation - see Site Work for Scheme 1.50						
Site Development - see Site Work for Scheme 1.50 Utilities - see Site Work for Scheme 1.50						
Othlies - see Site Work for Scheme 1.50						
TOTAL PARKING GARAGE					\$1,168,983	\$1, 168,983
					· .,	J.13
Note: No Police and storage Area in this scheme (1.60)						
Gymnasium						
,						
Foundations:						
Set up for very small caisson project		LSUM	12,000.00	\$12,000		
Caisson 30" diameter		LNFT	125.00	\$3,000		
Remove disposed soil		CUYD	25.00	\$125		
Excavate/dispose/backfill for grade beams and pile caps Concrete in pile caps		CUYD	40.00 220.00	\$6,000 \$550		
Concrete in pile caps Concrete in grade beams		CUYD	220.00	\$550 \$8,800		
Formwork to pile caps		SQFT	12.00	\$1,296		
Farming to grade been		COLL	0.00	05,200		

Slab on Grade

Sub-total

Rebar to pile cap

Rebar to grade beam

Formwork to grade beam

Extra for hand excavation

Allowance for misc. structural details/unknown conditions

666 SQFT

150 CUYD

1 LSUM

162 LBS

6,000 LBS

9.00

2.00

1.00

80.00

25,000.00

\$5,994

\$6,000

\$12,000

\$25,000

\$81,089

\$81,089

\$324

6" Concrete slab on grade Joint to str slab and grade beams forming knock-out panel Sub-total		SQFT LNFT	6.25 100.00	\$4,125 \$12,800 \$16,925	\$16,925
Structural Roof Slab and Support Steel beams and bar joists supporting roof 2" Galvanised metal deck Sub-total	54,500 5,4 5 0	LBS SQFT	1.25 2.20	\$68,125 \$11,990 \$80,115	\$80,115
Exterior Walls 4" Brick veneer, 2" r/ins and 12" CMU reinf and grouted Extra for sound absorbing block Allow for architectural features Eaves detail Aluminum windows Double doors Bond beams at windows and doors Lintel at windows and doors Sill at windows Flashing at windows and doors Thru wall flashing Sealant Steel tube	3,000 1 306 600 2 158 158 120 316 464 420 25	SQFT SQFT LSUM LNFT SQFT PAIR LNFT LNFT LNFT SQFT SQFT LNFT LNFT	44.00 3.00 23,000.00 55.00 65.00 5,500.00 22.00 20.00 35.00 6.00 4.00 50.00	\$220,440 \$9,000 \$23,000 \$16,830 \$39,000 \$11,000 \$3,476 \$3,160 \$4,200 \$1,896 \$2,784 \$1,680 \$1,250	
Steel beams Allow for addit structural work to support knock-out panels Extra for joint forming knock out panels in masonry wall Extra work at top of ex building wall Sub-total	1 208	LNFT LSUM LNFT LNFT	100.00 15,000.00 55.00 35.00	\$14,800 \$15,000 \$11,440 \$2,590 \$381,546	\$381,546
Roof Finishes and Accessories Single membrane roofing over tapered insulation Skylights- 5' x 5' Upstands at sklights and roof perimeter Allow for roof drainage Sub-total	16 620	SQFT EACH LNFT LSUM	12.00 750.00 8.00 3,300.00	\$60,000 \$12,000 \$4,960 \$3,300 \$80,260	\$80,260
Interior Partitions and Doors 12" CMU partition 8" Bond beam Double door and frame include hardware Sub-total	14	SQFT LNFT PAIR	18.00 20.00 1,650.00	\$13,500 \$280 \$3,300 \$17,080	\$17,080
Interior Finishes Maple hardwood floor on sleepers Paint for sports layout Exposed ceilings - painted Paint CMU walls Interface/8" CMU next ex. Wall Allow at window sill/surround Paint double door and frame Base Sub-total	4	SQFT SQFT SQFT	10.00 incl 2.50 0.60 20.00 10.00 75.00 7.00	\$54,000 \$0 \$13,500 \$4,086 \$22,200 \$4,800 \$300 \$2,016 \$100,902	\$100,902
Specialties and Equipment Bleachers, folding - 3' deep seets (156 #) Retractable b'ball supports - motorized (4 #) Volleyball set-ups, in floor - movable (2#) Floor mats Wall mats Electric scoreboard - 6' x 10' (1#) Room divider net w/ motorized 54' length x 25' high (1#) Misc. equipment, boards, posters, carts - allowance Sub-total	1 300 300 1 1	LSUM LSUM LSUM SQFT SQFT LSUM LSUM LSUM	23,400.00 25,000.00 6,500.00 6.00 10,000.00 23,150.00 15,000.00	\$23,400 \$25,000 \$6,500 \$1,800 \$10,000 \$23,150 \$15,000 \$106,650	\$106,650

Stair

Not Applicable Sub-total	1	LSUM		\$0 \$0	\$0	
HVAC Allowance Sub-total	5,859	GSF	33.50	\$196,277 \$196,277	\$196,277	
Plumbing Allowance Sub-total	5,859	GSF	1.50	\$8,789 \$8,789	\$8,789	
Electrical Allowance Sub-total	5,859	GSF	17.40	\$101,947 \$101,947	\$101,947	
Fire Protection Allowance Sub-total	5,859	GSF	4.60	\$26,951 \$26,951	\$26,951	
Site Preparation - see Site Work for Scheme 1.50 Site Development - see Site Work for Scheme 1.50 Utilities - see Site Work for Scheme 1.50						
TOTAL GYMNASIUM					\$1,198,530	\$1,198,530
Support Space						
Foundations: Not Applicable Sub-total				\$0	\$0	
Slab on Grade Not Applicable Sub-total				\$0	\$0	
Structural Roof Slab and Support Steel beams and bar joists supporting roof 2" Galvanised metal deck Sub-total	14,470 1,447		1.30 1.40	\$18,811 \$2,026 \$20,837	\$20,837	
Exterior Walls 4" Brick veneer, 2" r/ins and 8" CMU reinforced and grouted Allow for architectural features Eaves detail Double doors Bond beams at doors Lintel at doors Flashing at doors Thru wall flashing	1 47 1 7 7 14 94	SQFT LSUM LNFT PAIR LNFT LNFT SQFT SQFT	40.00 2,000.00 55.00 5,500.00 22.00 20.00 6.00 6.00	\$24,520 \$2,000 \$2,585 \$5,500 \$154 \$140 \$84 \$564		
Sealant Sub-total	54	LNFT	4.00	\$216 \$35,763	\$35,763	
Roof Finishes and Accessories Single membrane roofing over tapered insulation Skylights- 5' x 5' Upstands at sklights and roof perimeter Allow for roof drainage Sub-total	276	SQFT EACH LNFT LSUM	12.00 750.00 8.00 1,100.00	\$16,800 \$6,000 \$2,208 \$1,100 \$26,108	\$26,108	
Interior Partitions and Doors 8" CMU partition 8" Bond beam Single door and frame include hardware Double door and frame include hardware	4	SQFT LNFT EACH PAIR	16.00 20.00 990.00 1,650.00	\$26,768 \$560 \$3,960 \$3,300		

Cut and form single door opening in ex exterior wall Sub-total	1	LSUM	650.00	\$650 \$35,238	\$35,238	
Interior Finishes						
Porcelain tile	450	SQFT	15.00	\$6,750		
Ceramic tiles		SQFT	13.00	\$13,650		
Sealed concrete		SQFT	2.00	\$200		
Exposed ceilings - painted		SQFT	2.50	\$250		
2' x 2' Lay-in ceiling	1,050	SQFT	3.75	\$3,938		
2' x 2' Lay-in ceiling, washable surface		SQFT	5.00	\$2,250		
Paint CMU walls	3,975	SQFT	0.60	\$2,385		
Interface/8" CMU next ex. Wall	756	SQFT	20.00	\$15,120		
Paint single door and frame		EACH	55.00	\$220		
Paint double door and frame		EACH	75.00	\$375		
Extra for ceramic tile wainscot 8' high		SQFT	12.00	\$11,592		
Ceramic tile base		LNFT	13.00	\$1,560		
Base (not ceramic)	478	LNFT	7.00	\$3,346		
Sub-total				\$61,636	\$61,636	
Specialties and Equipment						
Double tiered lockers	80	EACH	295.00	\$23,600		
Concrete pad below lockers	190	SQFT	7.00	\$1,330		
Mirrors - allow	1	LSUM	4,200.00	\$4,200		
Benches - allow	1	LSUM	4,000.00	\$4,000		
Toilet partition - painted metal		EACH	950.00	\$3,800		
Extra for handicapped partition		EACH	350.00	\$700		
Urinal screen - painted metal		EACH	500.00	\$500		
Metal storage shelving - allow		SQFT	8.00	\$576		
Vanity tops	24	LNFT	250.00	\$6,000		
Sub-total .				\$44,706	\$44,706	
Stair						
Not Applicable						
Sub-total						
HVAC						
Allowance	1,647	GSF	24.50	\$40,352		
Sub-total				\$40,352	\$40,352	
Plumbing						
Allowance	1,647	GSF	12.50	\$20,588		
Sub-total Sub-total				\$20,588	\$20,588	
Electrical						
Allowance	1,647	GSF	17.40	\$28,658		
Sub-total	.,=.,			\$28,658	\$28,658	
Fire Destaction						
Fire Protection Allowance	1,647	GSE	5.50	\$9,059		
Sub-total	1,047	GSF	5.50	\$9,059	\$9,059	
Site Preparation - see Site Work for Scheme 1.50						
Site Development - see Site Work for Scheme 1.50						
Utilities - see Site Work for Scheme 1.50						
TOTAL GUIDDORT ODAGE					****	*****
TOTAL SUPPORT SPACE					\$322,943	\$322,943
Site Work						
Site Work						
Demolition:						
Demolish the following:	00.005	00==		****		
Bituminous roadway and paving Curb and gutter	20,235	SQFT	0.70 4.00	\$14,165 \$3,400		
tann and dimer	וומא	I IMP I	/I [][]	* 4 /11111		

Curb and gutter

Concrete stairs appx. 3' w w/ 8 risers and m/railing each side

850 LNFT

1 EACH

4.00

50.00

\$3,400

\$50

Concrete sidewalk		SQFT	2.00	\$720		
Remove debris from site New Work:	1	LSUM	9,750.00	\$9,750		
Site excavation						
Excavate to reduce levels and form basement	5 243	CUYD	7.00	\$36,701		
Backfill		CUYD	8.00	\$3,416		
Dispose of surplus		CUYD	25.00	\$120,400		
Earth retention/sheeting and shoring		SQFT	22.00	\$75,790		
Keep water from excavations		LSUM	5,000.00	\$5,000		
Excavate to reduce levels for landscape		CUYD	7.00	\$26,963		
Dispose on site	,	CUYD	9.00	\$34,667		
Imported top soil -allow	47	CUYD	35.00	\$1,633		
Grade and seed	1,260	SQFT	3.00	\$3,780		
Hardscape						
New bituminous paving on gravel bed	17,175	SQFT	3.25	\$55,819		
Striping	432	LNFT	0.60	\$259		
Curb/gutter - allow	600	LNFT	15.00	\$9,000		
Concrete sidewalk	4,930	SQFT	5.25	\$25,883		
Steps in sidewalk	75	LFR	22.00	\$1,650		
Stone faced concrete retaining wall average 5' high - allow	155	LNFT	800.00	\$124,000		
Rough and fine grade over area	22,105	SQFT	2.00	\$44,210		
Allowances:						
Site lighting		LSUM	7,500.00	\$7,500		
Site drainage		LSUM	8,000.00	\$8,000		
New trees (20) and removal of existing as required		LSUM	40,000.00	\$40,000		
Miscellaneous landscaping at islands, etc.	1	LSUM	10,000.00	\$10,000		
TOTAL SITE WORK				\$662,755	\$662,755	\$662,755
Site Utilities						
Re-route cable/fiber optic cables	1	LSUM	4.000.00	£4.000		
Re-route cable/fiber optic cables	'	L201VI	4,000.00	\$4,000		
TOTAL SITE UTILITIES				\$4,000	\$4,000	\$4,000
Note: Existing construction trailers with overhead electrical linin connection with this is EXCLUDED.	nes - any w	ork				
Grand Sub-total						\$2 257 944
Add						\$3,357,211
General Conditions, Fee and Bond	18%		604,298			\$3,961,509
Design Contingency	15%		594,226			\$4,555,735
Escalation	16%		728,918			\$5,284,652
Construction Contingency	5%		264,233			\$5,548,885
Solida addition Solida agents	370		204,230			\$0,0 1 0,000
SCHEME 1.60 - ESTIMATED TOTAL COST OF CONSTRUC	TION					\$5,548,885

Add Alternates

Scheme 1.50

Suggested A	lliowances 1	or the	tollowina	add ons

	Basic Cost	Costs incl. GC., DC Esc./C.Ctg.
1 LSUM	\$327,974	\$542,084
1 LSUM	\$150,000	\$247,924
1 LSUM	\$96,000	\$158,671
1 LSUM	\$127,600	\$210,901
1 LSUM	\$5,742	\$9,491
1 LSUM	\$30,000	\$49,585
1 LSUM	\$4,000	\$6,611
1 LSUM	(\$9,713)	(\$16,054)
1 LSUM	\$6,000	\$9,917
1 LSUM	\$7,000	\$11,570
1 LSUM	\$5,500	\$9,091
1 LSUM	\$5,500	\$9,091
	1 LSUM	1 LSUM \$327,974 1 LSUM \$150,000 1 LSUM \$96,000 1 LSUM \$127,600 1 LSUM \$5,742 1 LSUM \$30,000 1 LSUM \$4,000 1 LSUM \$6,000 1 LSUM \$7,000 1 LSUM \$7,000 1 LSUM \$5,500

Scheme 3.20

Suggested allowances for the following add ons: Green roof and strengthening of building for same, including perimeter walk-ways and cross-aisles.		Basic Cost	Costs incl. GC., DC Esc./C.Ctg.
perimeter railing, etc. Gymnasium - Roof Area 7,770 SF	1 LSUM	\$327,974	\$542,084
Exterior stair access from 1st Floor level - Gymnasium Roof (30' travel)	1 LSUM	\$150,000	\$247,924
Masonry towers (3#) at Gymnasium Roof; each 16' x 16' x 10' high to eaves with peaked roof	1 LSUM	\$96,000	\$158,671
Mock Pitched Roof detail between towers 10' high and 10' wide on plan	1 LSUM	\$127,600	\$210,901
Corbelled brick courses at eaves	1 LSUM	\$5,742	\$9,491
Decorative brick patterns, embellishments, multicolor brick - extent?	1 LSUM	\$30,000	\$49,585
Entrance canopy - 8' x 6' Metal framed with aluminum fascia; s/membrane roof and ext gypbd soffit	1 LSUM	\$4,000	\$6,611
Synthetic wood gymn floor	1 LSUM	(\$9,713)	(\$16,054)
Low odor paint	1 LSUM	\$6,625	\$10,950
Solar hot water system for Gymn lavatories	1 LSUM	\$7,000	\$11,570
5000 Watt Photo voltaic panels for exterior lighting; panels on roof; supplement to regular lighting	1 LSUM	\$5,500	\$9,091
5000 Watt Photo voltaic panels for interior lighting; panels on roof; supplement to regular lighting	1 LSUM	\$5,500	\$9,091

Scheme 1.6
Suggested allowances for the following add ons:

Green roof and strengthening of building for same, including perimeter walk-ways and cross-aisles, perimeter railing, etc.			Costs incl. GC., DC Esc./C.Ctg.	
Gymnasium - Roof Area 7,770 SF	1 LSUM	\$233,075	\$385,232	
Stair access from 1st Floor level - Gymnasium Roof (25' travel)	1 LSUM	\$125,000	\$206,603	ı
Masonry towers (3#) at Gymnasium Roof; each 16' x 16' x 10' high to eaves with peaked roof	1 LSUM	\$96,000	\$158,671	
Mock Pitched Roof detail between towers 10' high and 10' wide on plan	1 LSUM	\$103,200	\$170,572	
Corbelled brick courses at eaves	1 LSUM	\$4,644	\$7,676	
Decorative brick patterns, embellishments, multicolor brick - extent?	1 LSUM	\$20,000	\$33,057	
Entrance canopy - 8' x 6' Metal framed with aluminum fascia; s/membrane roof and ext gypbd soffit	1 LSUM	\$4,000	\$6,611	
Synthetic wood gymn floor	1 LSUM	(\$6,750)	-\$11,157	
Low odor paint?	1 LSUM	\$3,875	\$6,405	
Solar hot water system for Gymn lavatories	1 LSUM	\$7,000	\$11,570	
5000 Watt Photo voltaic panels for exterior lighting; panels on roof; supplement to regular lighting	1 LSUM	\$5,500	\$9,091	
5000 Watt Photo voltaic panels for interior lighting; panels on roof; supplement to regular lighting	1 LSUM	\$5,500	\$9,091	